

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP03/02362

A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl⁷ B23B27/14

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl⁷ B23B27/14, C04B35/58

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

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Kokai Jitsuyo Shinan Koho	1971-2003	Jitsuyo Shinan Toroku Koho	1996-2003

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 56-156738 A (Sumitomo Electric Industries, Ltd.), 03 December, 1981 (03.12.81), Full text (Family: none)	1-6
X	JP 56-9279 A (Sumitomo Electric Industries, Ltd.), 30 January, 1981 (30.01.81), Page 3, lower left column, line 2 to page 4, lower left column, line 10 (Family: none)	1-6
A	JP 2001-322006 A (Mitsubishi Materials Corp.), 20 November, 2001 (20.11.01), Par. Nos. [0006] to [0008] (Family: none)	1-6

☒ Further documents are listed in the continuation of Box C.☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

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"P" document published prior to the international filing date but later than the priority date claimed

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"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search
01 April, 2003 (01.04.03)Date of mailing of the international search report
15 April, 2003 (15.04.03)Name and mailing address of the ISA/
Japanese Patent Office

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 61-201751 A (NOF Corp.), 06 September, 1986 (06.09.86), Page 1, lower left column, line 4 to page 2, lower left column, line 12 (Family: none)	1-6
A	JP 59-41445 A (Mitsubishi Metal Corp.), 07 March, 1984 (07.03.84), Page 1, lower left column, line 5 to lower right column, line 2 (Family: none)	1-6
A	JP 58-164750 A (Mitsubishi Metal Corp.), 29 September, 1983 (29.09.83), Page 1, lower left column, line 5 to lower right column, line 6 (Family: none)	1-6
A	JP 58-113348 A (Mitsubishi Metal Corp.), 06 July, 1983 (06.07.83), Page 1, lower left column, line 5 to lower right column, line 12 (Family: none)	1-6